

Appln No. 09/900,224

Amdt date December 14, 2004

Reply to Office action of September 14, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for concealing a parameter transferred between a first and second device, characterized by:

generating by the first device a control signal and a parameter signal;

transforming by the first device a portion of the control signal with the parameter signal to generate an encrypted parameter signal and control signal;

transmitting by the first device to the second device the control signal and the encrypted parameter signal and control signal;

receiving by the second device from the first device the control signal and the encrypted parameter signal and control signal; and

generating by the second device a destination parameter signal using the control signal and the encrypted parameter signal and control signal.

2. (Currently Amended) The method of claim 1, further characterized by:

generating by the first device a first key signal using the control signal; and

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~~generating by the first device the parameter signal by~~
~~wherein transforming a source parameter signal comprises~~ using
the first key signal.

3. (Currently Amended) The method of claim 2, further characterized by:

generating by the second device a second key signal using the control signal; and

generating by the second device the destination parameter signal by inversely transforming the encrypted parameter signal using the second key signal.

4. (Original) The method of claim 3, further characterized by:

generating by the first device a key index signal;

generating by the first device a key variable signal;

transmitting by the first device to the second the key index signal and the key variable signal;

receiving by the second device from the first device the key index signal and the key variable signal;

generating by the second device an intermediate key signal using the key index signal and a key table; and

generating by the second device the second key signal using the intermediate key signal and the key variable signal.

5. (Original) The method of claim 4, further characterized by generating by the second device the second key

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signal from the intermediate key signal and the key variable signal using a hash function.

6. (Currently Amended) The method of claim 3, further characterized by:

~~transforming by the first device a portion of the control signal with the source parameter signal to generate the parameter signal; and~~

generating by the second device from the encrypted control parameter signal using the second key signal an inversely transformed control signal portion; and

comparing by the second device the inversely transformed control signal portion to a portion of the received control signal.

7. (Currently Amended) An apparatus for processing a concealed parameter received by a device, characterized by:

a control logic block to receive a control signal and an encrypted parameter signal and control signal; and

an interface operation logic block operably coupled to the control signal block to generate a destination parameter signal using the control signal and the encrypted parameter signal and control signal.

8. (Currently Amended) The apparatus of claim 7, further characterized by:

a key table module including indexed transformation keys, the key table module operably coupled to the control logic

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block, the key table module to generate a key signal using the control signal; and

an inverse transformation module operably coupled to the key table module and the control logic block, the inverse transformation module to generate the destination parameter signal by inversely transforming the encrypted parameter signal using the key signal.

9. (Currently Amended) The apparatus of claim 7, further characterized by:

a key table module including indexed transformation keys, the key table module operably coupled to the control logic block, the key table module to generate an intermediate key signal using a key index signal received from the control logic block;

a key interface stage operably coupled to the key table module and the control logic block for generating a key signal using the intermediate key signal received from the key table module and a key variable signal received from the control logic block; and

an inverse transformation module operably coupled to the key interface stage and the control logic block, the inverse transformation module to generate the destination parameter signal by inversely transforming the encrypted parameter signal using the key signal received from the key interface stage.

10. (Original) The apparatus of claim 9 further characterized by a hash function stage operably coupled to the

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key interface stage, the hash function stage to generate the key signal from the intermediate key signal and the key variable signal.